What is claimed is:

1. A speech coding system with input signal transformation, comprising:

an encoder disposed to receive an input signal, the encoder to provide a bitstream based upon a speech coding of a portion of the input signal,

where the encoder selectively sets the input signal to a zero-level when a portion of the input signal comprises silence noise.

2. The speech coding system according to Claim 1,

where the encoder adaptively tracks a zero-level and at least one quantization level of the input signal;

where the encoder calculates at least one silence detection parameter; and

where the encoder compares the at least one silence detection parameter of the input signal to at least one threshold.

3. The speech coding system according to Claim 2, where the zero-level is one of 0 and 8.

4. The speech coding system according to Claim 2, where the at least one quantization level comprises:

a smallest positive signal value;

a second smallest positive signal value;

a smallest absolute negative signal value; and

a second smallest absolute negative signal value.

5. The speech coding system according to Claim 2, where the at least one silence detection parameter comprises at least one frame rate.

6. The speech coding system according to Claim 5, where the at least one frame rate comprises at least one of a zero_rate, a low_rate, and a high_rate.

7. The speech coding system according to Claim 1, where the encoder ramps the input signal to a zero-level when a current portion of the input signal is a first silence portion.

8. The speech coding system according to Claim 1, where the encoder maintains the input signal at the zero-level when consecutive portions of the input signal comprise silence noise.

9. The speech coding system according to Claim 1, where the encoder ramps-up the input signal from a zero-level when a current portion of the input signal is a first non-silence portion.

10. The speech coding system according to Claim 1, where the encoder maintains the input signal when consecutive portions of the input signal do not comprise silence noise.

11. The speech coding system according to Claim 1, where the speech coding comprises code excited linear prediction (CELP).

12. The speech coding system according to Claim 1, where the speech coding comprises extended code excited linear prediction (eX-CELP).

13. The speech coding system according to Claim 1, where the portion of the input signal is one of a frame, a sub-frame, and a half frame.

14. The speech coding system according to Claim 1, where the encoder comprises a digital signal processing (DSP) chip.

15. The speech coding system according to Claim 1, further comprising a decoder operatively connected to receive the bitstream from the encoder, the decoder to provide a reconstructed signal based upon the bitstream.

16. A method of transforming an input signal in a speech coding system, comprising:

adaptively tracking a zero-level and at least one quantization level of the input signal;

calculating at least one silence detection parameter;

comparing the at least one silence detection parameter to at least one threshold;

determining whether the input signal comprises silence noise; and

selectively setting the input signal to a zero-level when the input signal comprises silence noise.

17. The method according to Claim 16, further comprising:

determining whether a current portion of the input signal is a first silence portion when the current portion is determined to comprise silence noise; and

ramping the input signal to a zero-level when the current portion of the input signal is the first silence portion.

18. The method according to Claim 17, further comprising maintaining the input signal at the zero-level when there are consecutive silence portions of the input signal.

19. The method according to Claim 16, further comprising:

determining whether a current portion of the input signal is a first non-silence portion when the current portion is determined not to comprise silence noise; and

ramping-up the input signal from a zero-level when the current portion of the input signal is the first non-silence portion.

20. The method according to Claim 19, further comprising maintaining the input signal when there are consecutive non-silence portions of the input signal.

21. The method according to Claim 16, further comprising comparing the at least one silence detection parameter with the at least one threshold individually or in combination.

22. The method according to Claim 16, further comprising: comparing the at least one silence detection parameter from the current portion of the input signal and from at least one preceding portion of the input signal with the at least one threshold.